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Reasons for Decision

EnCana Ekwan Pipeline Inc.

GH-1-2003



September 2003

Facilities

National Energy Board

Reasons for Decision

In the Matter of

EnCana Ekwan Pipeline Inc.

Application dated 17 March 2003 for the
construction and operation of the Ekwan
Pipeline

GH-1-2003

September 2003

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Approximate Conversions

1 metre = 3.28 feet

1 kilometre = 0.62 mile

1 cubic metre = 35.3 cubic feet

1 hectare = 2.47 acres

1000 kilopascals = 145 psi

Abbreviations

10 ³ m ³ /d	thousand cubic metres per day
10 ⁶ m ³ /d	million cubic metres per day
Bcf/d	billion cubic feet per day
Board or NEB	National Energy Board
CEA Act	<i>Canadian Environmental Assessment Act</i>
CSA	Canadian Standards Association
EnCana Ekwan or Applicant	EnCana Ekwan Pipeline Inc.
EnCana O&G	EnCana Oil & Gas Partnership
FBE	Fusion Bond Epoxy
ha	hectares
HDD	horizontal directional drilling
km	kilometre
KP	kilometre post
kPag	kilopascals (gauge)
LWBC	Land and Water British Columbia Inc.
m	metre
mm	millimetre
MMcf/d	millions of cubic feet per day
MOG	Memorandum of Guidance on the Regulation of Group 2 Companies
NEB Act	<i>National Energy Board Act</i>
NGTL	Nova Gas Transmission Ltd.
NPS	nominal pipe size (in inches)
NSOCSF	Northern Society of Oilfield Contractors and Service Firms
OPR-99	<i>Onshore Pipeline Regulations, 1999</i>
PDR	Petroleum Development Road

PLA	Pipeline Lease Agreement
psig	pounds per square inch (gauge)
RoW	right-of-way
SCADA	supervisory control and data acquisition
SYD	Sierra-Yoyo-Desan
Westcoast	Westcoast Energy Inc.

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* (NEB Act or the Act) and the Regulations made thereunder; and

IN THE MATTER OF an application dated 17 March 2003 by EnCana Ekwan Pipeline Inc. for a certificate of public convenience and necessity pursuant to section 52 of the NEB Act to construct and operate the proposed Ekwan Pipeline; and

IN THE MATTER OF Hearing Order GH-1-2003;

HEARD in Fort St. John, British Columbia on 28 and 29 July 2003.

BEFORE:

K. W. Vollman	Presiding Member
J.-P. Théorêt	Member
G. Caron	Member

APPEARANCES:

COMPANY:

WITNESSES:

T. H. Hughes

EnCana Ekwan Pipeline Inc.

J. Christoffersen
R. Eccles
G. Fedirchuk
H. Jung
B. Ramsay
P. Tahmazian
R. Wight

B. Fedderley

Northern Society of Oilfield Contractors
& Service Firms

J. Locher


City of Fort St. John

Chief D. Testawich
D. Good Striker

Duncan's First Nation

M. L. Haug
J. B. Hanebury, Q.C.

Board Counsel



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Chapter 1

Introduction

On 17 March 2003, EnCana Ekwan Pipeline Inc. (EnCana Ekwan or Applicant) applied to the National Energy Board (the Board or NEB) for:

- a) a Certificate of Public Convenience and Necessity pursuant to Section 52 of the NEB Act authorizing EnCana Ekwan to construct and operate a pipeline in northeastern British Columbia and northwestern Alberta (Ekwan Pipeline);
- b) an Order made pursuant to Part IV of the NEB Act designating EnCana Ekwan as a Group 2 company in respect of the Ekwan Pipeline;
- c) an exemption, pursuant to Part I of the Board's Guidelines for Filing Requirements, from having to comply with certain filing requirements;
- d) such further and other relief as EnCana Ekwan may request or as the Board may deem appropriate pursuant to Section 20 of the NEB Act; and
- e) a determination under the *Canadian Environmental Assessment Act* (CEA Act).

The proposed Ekwan Pipeline would consist of approximately 83 km of 610 mm (NPS 24) outside diameter sweet dry natural gas transmission pipeline and related facilities consisting of pipeline risers, a pig launcher, a pig receiver, valves, supervisory control and data acquisition (SCADA) and cathodic protection facilities and tie-in pipelines. The design capacity of the Ekwan Pipeline would be approximately $11.8 \times 10^6 \text{ m}^3/\text{d}$ (418 MMcf/d). The pipeline route would commence at the EnCana Oil & Gas Partnership (EnCana O&G) Sierra Gas Plant located at a-26-K 94-I-11, approximately 81 km east of Fort Nelson, British Columbia and terminate at a tie-in point on the Nova Gas Transmission Ltd. (NGTL) Northwest Mainline located at 10-15-111-12 W6M, approximately four km east of the Alberta/British Columbia border, near Rainbow Lake, Alberta (see Figure 1-1). The purpose of the Ekwan Pipeline would be to allow the transportation of sweet natural gas to be produced by EnCana O&G from wells located in the Greater Sierra area of British Columbia to the NGTL pipeline system in Alberta.

EnCana Ekwan proposed to construct the Ekwan Pipeline between December 2003 and March 2004, with an anticipated startup date of early April 2004. The total capital cost of the Ekwan Pipeline is estimated to be \$55 million.

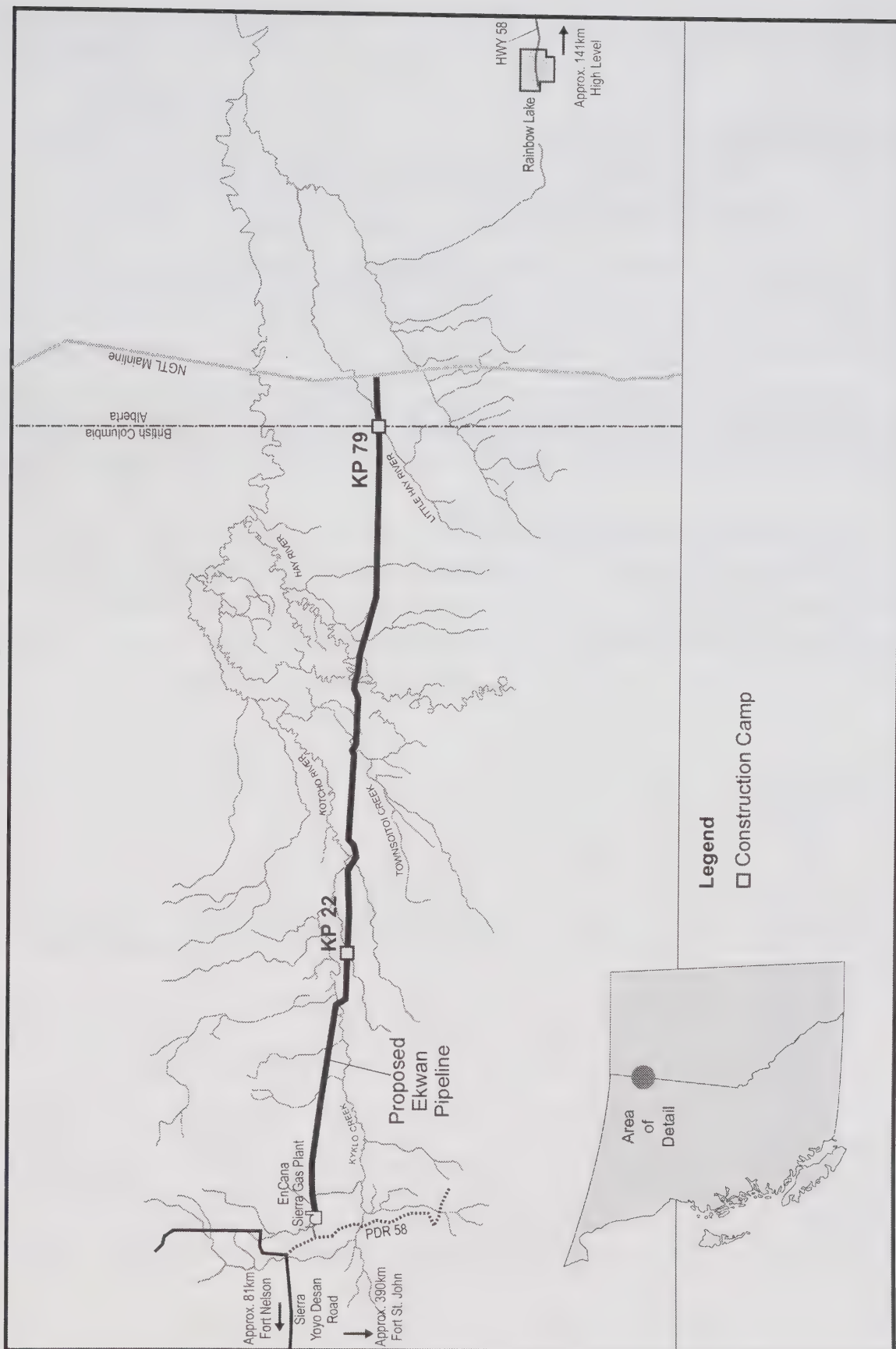
The Board decided to consider the application in an oral public hearing and issued Hearing Order GH-1-2003 on 25 April 2003. In the Hearing Order the Board stated the hearing would begin on 28 July 2003. This date was selected to enable EnCana Ekwan to file the results and supporting information of the field studies it proposed to conduct in May, June and July 2003.

From 12 to 15 May 2003, NEB staff conducted public information sessions near the proposed Ekwan Pipeline route in High Level and Rainbow Lake, Alberta and Fort Nelson and Fort St. John, British Columbia. The purpose of the sessions was to describe the role of the Board, the public hearing process and how the public could participate in the hearing. The Board also wrote to the six aboriginal groups who were identified as having an interest in the proposed project to notify them of the upcoming public information sessions and to offer to meet with them individually for the same purpose. The Fort St. John Metis Society accepted the Board's invitation and, on 16 May 2003, Board staff met with the Society and provided the same information as was provided in the previous public information sessions.

The oral hearing was held in Fort St. John, British Columbia on 28 and 29 July 2003. Three intervenors appeared: City of Fort St. John, Duncan's First Nation and the Northern Society of Oilfield Contractors and Service Firms. Mr. Omar Lazarowich also intervened in the proceeding and asked questions of the Applicant but did not appear at the hearing.

As a responsible authority under the CEA Act, the Board completed an environmental screening report for the Ekwan Pipeline pursuant to the CEA Act and the Board's regulatory process.

**Figure 1-1
Ekwan Pipeline**



Chapter 2

Engineering Matters

2.1 Facilities Description

The Ekwan Pipeline would have the capability of transporting approximately $11.8 \times 10^6 \text{ m}^3/\text{d}$ (418 MMcf/d) of sweet dry natural gas, under the design inlet pressure of 9650 kPag (1400 psig) and design outlet pressure of 8450 kPag (1226 psig). The expected outlet pressure at startup would be 6200 kPag (900 psig), which would be determined by the NGTL inlet pressure.

The 83.6 km proposed pipeline route would involve eight watercourse crossings, four of which would require horizontal directional drilling (HDD). Geotechnical investigations of the four HDD crossings indicate that the subsurface conditions are conducive to this type of crossing.

2.2 Appropriateness of the Design

EnCana Ekwan stated that it would design and construct the Ekwan Pipeline to meet the requirements of the *Onshore Pipeline Regulations, 1999* (OPR-99) and Canadian Standards Association (CSA) Standard Z662-99, *Oil and Gas Pipeline Systems*.

Construction materials would meet or exceed the following specifications:

- Steel Line Pipe: CSA Z245.1 – 02
- Steel Fittings: CSA Z245.11 – 01
- Steel Flanges: CSA Z245.12 – 01
- Steel Valves: CSA Z245.15 – 01

The Ekwan Pipeline would be designed and tested in accordance with the requirements of the selected maximum operating pressure of 9930 kPag (1440 psig). The design specifications of the proposed pipeline are summarized in Table 2-1.

Table 2-1
Pipe Specifications for the Proposed Ekwan Pipeline

Outside Diameter (mm)	Material Grade (MPa)	Wall Thickness (mm)	Approximate Length (km)	External Pipeline Coating
610	483 Cat II M5C	7.9	81.5	Fusion Bond Epoxy
		11.1 **	2.1	(FBE)*

* All external pipeline coating to be utilized for HDD would be dual powder FBE abrasion coating.

** The heavier wall pipe would be utilized at road crossings, assemblies and other locations as defined by CSA requirements. In addition, heavy wall pipe would be utilized for the HDD.

No party challenged the technical basis for the proposed design, construction and operation of the Ekwan Pipeline.

Views of the Board

The Board is satisfied that the proposed facilities would be designed, constructed and operated in accordance with the NEB Act, OPR-99 and other appropriate standards and governing codes.

2.3 Pipeline Integrity Considerations

Corrosion Protection

The Ekwan Pipeline would transport sweet natural gas processed by the EnCana O&G Sierra Gas Plant. The plant has continuous monitoring of the water content of gas leaving the plant as well as alarm and shut-down controls, which would ensure that gas containing water does not enter the Ekwan Pipeline.

EnCana Ekwan's integrity management plan would involve in-line inspection of the pipeline. The pipeline would be equipped with a pig launcher and receiver capable of handling modern in-line inspection tools.

An impressed current cathodic protection system would supplement the external pipeline coating to provide corrosion protection for the entire pipeline.

Permafrost

The project area is located at the southern fringe of the discontinuous permafrost zone. EnCana Ekwan investigated the nature and extent of permafrost along the route of the Ekwan Pipeline by means of aerial photo interpretation, fixed-frequency electromagnetic surveys and ground-penetrating radar. EnCana Ekwan concluded from the results of this investigative fieldwork that the presence of ice-rich permafrost along the right-of-way (RoW) is unlikely. EnCana Ekwan stated that permafrost degradation would therefore cause little to no subsidence and, hence, would have little impact on pipeline integrity.

The pipeline route would parallel existing linear disturbances whenever feasible, where it is anticipated that the permafrost has already degraded. To mitigate permafrost degradation in undisturbed areas along the RoW, a Permafrost Protection Plan would be implemented.

Hydrostatic Pressure Testing

Prior to operation, the pipeline would be hydrostatically pressure tested in order to demonstrate that the pipeline is safe to operate to the requested maximum operating pressure. To minimize the effect on the environment during hydrostatic testing activities, commitments made in the Environmental Protection Plan would be followed.

Views of the Board

The Board accepts the Applicant's approach to corrosion protection and impact of permafrost.

In order to verify that proper procedures will be utilized, the Board will impose a condition in any certificate that may be granted requiring EnCana Ekwan to file its pressure testing program with the Board pursuant to sections 7 and 23 of the OPR-99.

Chapter 3

Land Matters

3.1 Route Description

The proposed route of the Ekwan Pipeline, described in Chapter 1, is located entirely on Crown land. The pipeline's 83 km RoW would be parallel to and contiguous with 20.5 km of existing road and utility RoW and would also follow 42.8 km of existing seismic lines.

3.2 Route Criteria and Selection

Route Criteria

EnCana Ekwan made an initial determination to maximize the use of existing rights-of-way, seismic lines and other disturbances for the proposed route. EnCana Ekwan would also utilize existing disturbances, to the extent possible, for temporary workspace. When determining the width of the RoW, EnCana Ekwan considered safe work practices, physical requirements for topsoil and spoil handling, size of equipment required for construction and provincial maximum clearing guidelines.

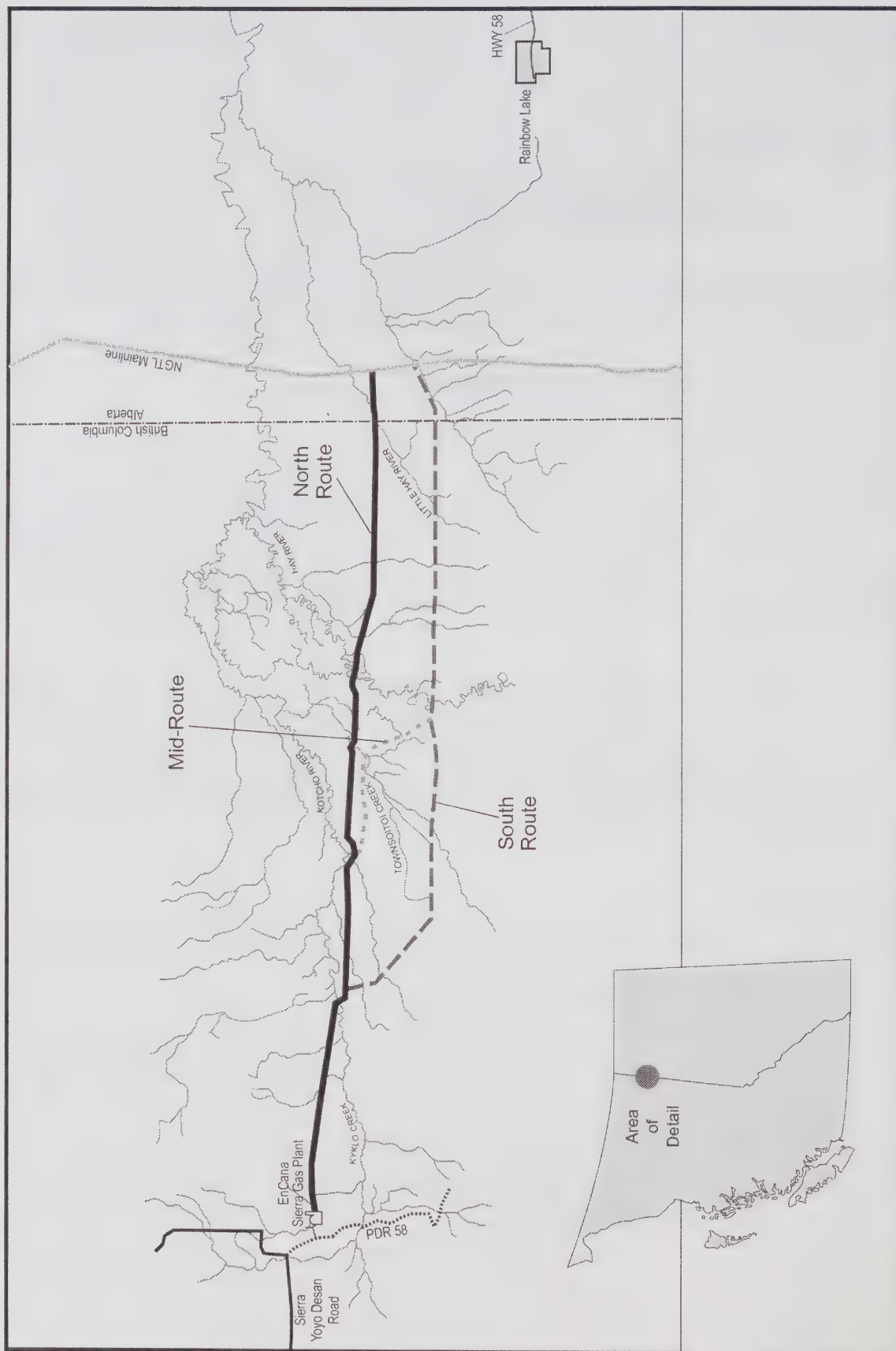
Three routing alternatives, described as the North, Mid-route and South routing alternatives, were considered for the purpose of moving gas from the EnCana O&G Sierra Gas Plant to the NGTL Northwest Mainline Pipeline (see Figure 3-1). Criteria for evaluating the three alternatives between the identified control points included an assessment of: (i) appropriate land use compatibility; (ii) construction cost and difficulties; and (iii) the biophysical sensitivities of the project area.

Route Selection

EnCana Ekwan selected the North route as the preferred alternative for the following reasons:

- construction costs and risks would be reduced;
- seventy-six percent of the length of the route would follow existing disturbed corridors;
- little new access potential and associated habitat fragmentation would be expected for the area;
- the resource management objectives would be compatible for the area; and
- provincial resource management agencies or affected stakeholders expressed no opposition to the North route.

Figure 3-1
Ekwan Pipeline Alternate Routes



Views of the Board

The Board has considered EnCana Ekwan's route selection criteria and routing alternatives and finds the proposed route to be acceptable.

3.3 Land Requirements and Access

Land Requirements

The length of the Ekwan Pipeline would be approximately 83 km. In Alberta, the width of the RoW would typically be 25 m. In British Columbia, it would be 15 m wide. At the west end of the proposed project, the RoW would parallel and be contiguous with:

- 80 m of EnCana O&G's existing RoW; and
- 20.5 km of Westcoast Energy Inc.'s¹ (Westcoast) existing RoW.

EnCana Ekwan would also utilize 5 m of temporary workspace located immediately adjacent to and on the south side of Westcoast's existing RoW. This would reduce the project RoW width for this segment of the pipeline to 20 m.

Extra temporary workspace would also be required at road crossings, pipeline crossings, watercourse crossings, side bends, graded areas, HDD entry and exit points, staging areas, timber decking sites, intermediate block valves, pressure test sites and at those sites where ditch side instability is identified and buoyancy control is required.

Cathodic protection ground beds would be installed at strategic locations along the British Columbia RoW and would also require additional permanent RoW. Above-ground block valves would be located at KP 30 and KP 55, and both pigging facilities would be located on the RoW. Land and Water British Columbia Inc. (LWBC) would determine if the cathodic protection beds, block valves and pig launcher facilities would be subject to additional tenure requirements.

EnCana Ekwan advised that the pipe would be delivered by rail to High Level, Alberta. As there is insufficient space to store all the pipe at the High Level rail standing, EnCana Ekwan is considering three existing disturbed sites located near Rainbow Lake, Alberta. The pipe storage site would be confirmed closer to the commencement of construction.

EnCana Ekwan would utilize two previously-disturbed sites for its construction camps for approximately five months. EnCana Ekwan stated that additional undisturbed area would also be required. The eastern camp, located south of KP 79 (see Figure 1-1), would require an estimated area of 3.1 hectares (ha). The western camp located near KP 22 would require an estimated area of 6.1 ha.

¹ Westcoast Energy Inc. carrying on business as Duke Energy Gas Transmission Canada

Land Acquisition

EnCana Ekwan would acquire a temporary permit (Permission to Construct) from LWBC for the British Columbia portion of the project. The temporary permit would also include the temporary workspaces required for pipeline construction. LWBC would issue a Statutory RoW following the registration of the final as-built survey plan for the project.

EnCana Ekwan would acquire a Letter of Authority for a Pipeline Lease Agreement (PLA) for the Alberta portion of the RoW from the Ministry of Sustainable Resources Development. All temporary workspace would be included in the PLA. The PLA would be registered in the Public Land Standing and the legal survey plan would be registered with Alberta Land Titles Registries.

EnCana Ekwan confirmed that Section 87 notices were served on the provincial government departments and the affected trappers and guide/outfitters as part of the land acquisition program.

Facility Crossings

EnCana Ekwan identified 26 facility crossings and confirmed that each of the related facility operators had been served with a Section 87 notice. None of the operators expressed any concerns with the proposed project. Upon completion of legal surveys, EnCana Ekwan would enter into crossing and proximity agreements with these operators. Further, EnCana Ekwan did not anticipate any problems with obtaining these agreements prior to the commencement of construction.

Right-of-Way Access

RoW access would be provided by all-weather and winter roads. Access to the west end of the RoW would be reached from Fort Nelson by following the existing all-weather roads:

- east along the Sierra-Yoyo-Desan (SYD) Road from Fort Nelson;
- south along the Petroleum Development Road (PDR) 58 from the SYD turnoff; and
- east along the Sierra Plant Road from the PDR 58 turnoff to the EnCana O&G Sierra Gas Plant.

Access to the east end of the RoW from Rainbow Lake, Alberta would likely follow:

- west along Highway 58 to the Nexen winter access road;
- north and west along the Nexen winter access road to the Alberta-British Columbia border; and
- north along the Alberta-British Columbia border winter access road.

In addition, EnCana Ekwan would construct minor trails to access the four watercourse crossings planned as HDDs. At the time of the hearing, the precise locations for these access trails had not been determined.

EnCana Ekwan advised that it would enter into road-use agreements in the fall, prior to construction of the winter roads. It stated that it did not anticipate any problem obtaining the necessary agreements prior to the commencement of construction.

Views of the Board

The potential impacts of the proposed pipeline on the landowners, including the amount of land required for permanent easement and temporary workspace, have been considered by the Board. The Board finds that EnCana Ekwan's anticipated requirements for easement and temporary work space are reasonable and justified.

EnCana Ekwan has completed the service of its Section 87 notices to all affected parties. The Board is satisfied that EnCana Ekwan will have all the required easement agreements, permits and licenses in place prior to the commencement of construction.

The Board notes that EnCana Ekwan would utilize, to the extent possible, the current road infrastructure to access the proposed project area. The Board finds EnCana Ekwan's anticipated access requirements to the RoW to be reasonable.

Chapter 4

Consultation Matters

Participants in EnCana Ekwan's consultation process included the general public, landowners, Aboriginal groups, trappers, municipal authorities, provincial and federal regulatory and government agencies, community and business organizations, environmental interest groups, non-governmental agencies and other interested parties.

The objective of EnCana Ekwan's consultation strategy was to:

- develop trust and credibility with the public;
- establish cooperation among EnCana Ekwan and interested parties;
- initiate and maintain timely, on-going contact with interested parties; and
- respond willingly to issues and concerns raised at any time.

4.1 Early Public Notification

EnCana Ekwan commenced its Early Public Notification program in October 2002 in order to:

- identify stakeholders;
- foster an open and well-documented public consultation process;
- formally introduce the project to key stakeholders;
- actively seek input into identifying and resolving issues;
- maintain ongoing communications with stakeholders throughout the construction phase; and
- advise stakeholders of their opportunities to communicate with the NEB.

EnCana Ekwan contacted all the identified stakeholders along the proposed route by mail in November and December 2002. EnCana Ekwan also provided the stakeholders with a copy of its brochure and copies of relevant Board Information Bulletins. In addition, copies of the environmental and socio-economic impact assessments were made available to the public at the Municipal Office in Fort Nelson and the Municipal District of MacKenzie No. 23 office in Fort Vermillion, Alberta. Parties were invited to provide comments and concerns on the possible routing alternatives and the project in general.

EnCana Ekwan held five open houses: three in British Columbia (two in Fort Nelson and one in Fort St. John) and two in Alberta (Rainbow Lake and High Level). EnCana Ekwan stated the open houses provided an opportunity for stakeholders to become familiar with the project, provide input and to have their questions or concerns addressed on a one-on-one basis by EnCana Ekwan representatives.

Based on EnCana Ekwan's exit survey, the majority of the open house participants indicated that the important benefits of the proposed project would be job creation, joint ventures and economic growth for the region. Other benefits identified by the participants included: increased opportunities for marketing oil and gas, improved road infrastructure and educational opportunities.

In the same exit survey, open house participants raised concerns regarding protection of the environment, creation of long-term rather than short-term employment, hunting, and the impact on First Nations and archaeological sites.

EnCana Ekwan committed to continue with ongoing public consultation to ensure that issues and concerns of all stakeholders are resolved and potential effects are mitigated.

Views of the Board

The Board is satisfied that EnCana Ekwan's public consultation strategy and early public notification program for the proposed project have met the objectives of the Board's Guidelines for Filing Requirements. The Board notes EnCana Ekwan's commitment to ongoing public consultation.

4.2 Aboriginal Consultation

EnCana Ekwan determined that the Dene Tha', Fort Nelson and Prophet River First Nations, all signatories to Treaty 8, and the Metis Council of British Columbia were the Aboriginal groups in the area who may be impacted by the project. The Applicant identified these groups based on its experience in the area and a review of a traditional land use boundaries map as well as the Fort Nelson Lands and Resource Management Plan. Discussions began in October 2002 with the Dene Tha' and Fort Nelson First Nations and in January 2003 with the Prophet River First Nation and the Metis Council of British Columbia.

EnCana Ekwan's discussions about the proposed project with the three First Nations resulted in EnCana Ekwan entering into separate Benefits Agreements with each of them. The content of these agreements is confidential. However, a letter of support for the project from each of the First Nations was filed with the Board.

EnCana Ekwan also met with the Metis Council of British Columbia on a number of occasions. The Metis Council was interested in obtaining work for its members and supplied EnCana Ekwan with a listing of its contractors and its membership's skills. EnCana Ekwan stated that these listings will be used during the tendering process and will be made available to its contractors.

EnCana Ekwan contacted the Duncan's First Nation after the First Nation filed an application for intervenor status. In its application, the First Nation stated its interests in the project were treaty rights to hunt, fish, trap and gather and un-surrendered resources. The Applicant stated it had not contacted the Duncan's First Nation initially as the Nations' reserve lands are located approximately 300 km south of the project area and the northern boundary of its traditional territory is approximately 120 km south of the project area. The location of these boundaries

was confirmed by a map which was filed as part of the Duncan's First Nation's intervention application. EnCana Ekwan also stated that the Duncan's First Nation was not listed in any of the references noted above which proponents generally refer to when determining which Aboriginal groups should be contacted.

During the course of the proceeding the Duncan's First Nation did not pre-file written evidence, although at the hearing it did present some documents which it used in its cross-examination of the Applicant. The Duncan's First Nation did not present a witness at the hearing. During its cross-examination of the Applicant, the Duncan's First Nation brought an oral motion to adjourn the hearing on the grounds that the application was deficient and that neither the Applicant nor the Crown had met their fiduciary obligation to consult with Treaty 8 members about the project. The Board denied the motion stating that it was not the Board's practice to adjourn a hearing before it is complete and send the Applicant away to do further work. The Duncan's First Nation was advised by the Board that it could raise its concern during final argument if it thought the Applicant had not made its case. The Duncan's First Nation filed a written final argument and submitted that the application was not complete as the Applicant had not addressed the socio-economic impacts the project would have on Treaty 8 members and had not considered the rights of Treaty 8 First Nations to be informed and to consent to this project.

Views of the Board

The Board is satisfied that EnCana Ekwan used appropriate means to determine which Aboriginal groups may have interests in the proposed project and conducted a consultation program with them in compliance with the Board's Guidelines for Filing Requirements. Further, the Board notes that EnCana Ekwan was able to adequately address the concerns of the Aboriginal groups initially contacted.

With regards to the Duncan's First Nation, the Board notes that both the traditional territory and reserve lands of this First Nation are a considerable distance from the proposed project, and therefore EnCana Ekwan would not have been in a position to know that the First Nation may have concerns with the project. The Board is satisfied that EnCana Ekwan responded appropriately by initiating discussions and attempting to address concerns raised by the Duncan's First Nation as soon as the First Nation expressed interests in the project.

The Board is of the view that the Applicant has sufficiently addressed any impact the project may have on the socio-economic conditions of the Treaty 8 members potentially affected by the project and has elaborated on this view in Chapter 5 of these Reasons. Additionally, in its environmental screening report, the Board has considered the impact the project would have on the aboriginal trappers and hunters who use land near the project and determined that the project is not likely to cause significant adverse impacts to them. The Board also notes that the Duncan's First Nation did not provide evidence that any treaty or aboriginal right it may have would be infringed by this project. Therefore,

the Board finds that there is no obligation or duty for the Crown or the Applicant to consult with the Duncan's First Nation. As a result, the information filed by the Applicant in relation to aboriginal consultation was sufficient.

Chapter 5

Socio-Economic Matters

As part of its application, EnCana Ekwan filed a Socio-Economic Impact Assessment of the proposed project. The Assessment considered a variety of socio-economic issues specific to the area including: employment, business and the economy; community services; regional transportation infrastructure and traffic volumes; and health and safety. EnCana Ekwan concluded that neither the construction nor the operation of the Ekwan Pipeline would result in significant adverse socio-economic effects and at the same time, the project would generate positive economic effects in the study area as well as other parts of Canada from project-related expenditures, employment and business opportunities.

EnCana Ekwan stated that the total workforce for the proposed project is predicted to peak at 350 workers but would average about 155 workers during the four month construction period. It is estimated that 100 direct construction-related jobs would be filled from within the study area although this number would depend on which pipeline contractor is awarded the work and from where it would recruit its workers. EnCana Ekwan stated it is committed to obtaining maximum benefit for the local communities and would be structuring its bidding tender process accordingly. The indirect and induced employment during construction is estimated to be 22 person-years in the study area and 168 in British Columbia. Of the estimated \$55 million capital cost for the project, approximately 22 and 4 percent could be spent in the study area in British Columbia and Alberta respectively.

In terms of the longer term benefits, EnCana Ekwan stated that the proposed project would generate employment for two new full-time field operators at the existing EnCana O&G Sierra Gas Plant during operations. It is anticipated that these positions would be filled by local labour. Additionally, EnCana Ekwan explained that upstream exploration and production has a positive impact on jobs and local spending. The Ekwan Pipeline would reduce the risk of these upstream activities being delayed in the future due to any outages that may occur on the Westcoast system due to maintenance or curtailments.

The majority of the area where the proposed project is located has been established in the Land and Resource Management Plan for Fort Nelson, as an Enhanced Resource Development area where the management intent is to provide for intensive development for resources such as timber, natural gas and minerals. The remainder of the proposed pipeline is located in an area which currently considers resource development acceptable provided that access development is appropriately managed and riparian and cultural/traditional values are protected.

As discussed in section 4.2 of these Reasons, EnCana Ekwan identified four Aboriginal groups in the vicinity of the proposed project: Fort Nelson, Prophet River, Dene Tha' First Nations and the Metis Council of British Columbia. Based on information gathered during its Early Public Notification program, EnCana Ekwan stated that Aboriginal groups were most interested in the employment and business opportunities that the project would provide for the local Aboriginal population. In response, EnCana Ekwan has set aside from the main pipeline construction

contracts specific economic opportunities for Aboriginal business and employment. Additionally, EnCana Ekwan has entered into separate benefits agreements with each of the First Nations and any discussions regarding employment and business opportunities would take place within the parameters of these agreements. As mentioned previously in section 4.2, EnCana Ekwan also met with the Metis Council of British Columbia to discuss employment opportunities.

The Northern Society of Oilfield Contractors and Service Firms (NSOCSF) raised concerns about the impact the proposed project would have on the socio-economic opportunities in the area. It argued that since the Ekwan Pipeline would move raw gas from British Columbia into Alberta, the proposed project would reduce the possibility of expanding gas transportation systems within British Columbia and therefore negatively affect the regional economy and jobs throughout the region and the province. The NSOCSF requested that the Board consider the long-term socio-economic impacts the Ekwan Pipeline would have on the region, the province and the country. It stated it had no position on whether the proposed project should be approved or denied.

In its written final argument, the City of Fort St. John stated it did not intend to either slow down or block approval of the proposed project but rather to make the following three concerns known to industry and regulatory bodies:

- the cumulative socio-economic impact of large energy projects on communities;
- the ability for local contractors or individuals to become involved in the construction and on-going maintenance of installed infrastructure; and
- the lack of capacity of existing pipelines and processing plants in northeastern British Columbia to handle the resource that is being developed.

To address these issues from a broader regional perspective, the City of Fort St. John suggested discussions be initiated with the Province of British Columbia, officials from local governments in the northeast area of the province and other resource developers.

The Ministry of Energy and Mines, on behalf of the Province of British Columbia, filed a letter of comment in support of the proposed project. It stated that the oil and gas industry has become a very significant contributor to the economy of the province as it generates revenues that are vital to fund services such as healthcare and education. Additionally, Canadian consumers that rely on the area of the proposed project for their gas supply would benefit from the additional natural gas provided by the Ekwan Pipeline.

Views of the Board

The Board is satisfied that EnCana Ekwan has adequately assessed the socio-economic impacts of the proposed project and is of the view that the proposed project would provide benefits to the local communities both in the short and long-term. Specifically, the Board is satisfied with the efforts EnCana Ekwan proposes to implement to ensure local workers and businesses are afforded business and employment opportunities.

With respect to the broader issues of resource development impacts on the northeastern region of British Columbia raised by the City of Fort St. John and the NSOCSF, the Board is of the view that these issues are beyond the scope of this proceeding. The Board notes however that the proposed project meets the local land use planning objectives and that the Province of British Columbia supports the project due to the economic benefits it would bring to the province. The Board also notes the agreements which EnCana Ekwan has made with the Metis and First Nations in the area of the proposed project and the letters of support for the Ekwan Pipeline from the three First Nations.

Chapter 6

Environmental Matters

6.1 Environmental Screening Process

The proposed project requires a Certificate of Public Convenience and Necessity under s.52 of the NEB Act, and thus triggers the requirement for an environmental screening under the CEA Act. As the lead Responsible Authority under the CEA Act, the Board carried out an environmental screening of the proposed project. The Board noted that the proposed project has the potential to adversely affect several components of the environment, as detailed in the environmental screening report. The Board was particularly interested in the predicted success of habitat reclamation measures and access controls proposed to mitigate potentially adverse environmental effects on wildlife and wildlife habitat and on vegetation.

The Board has determined, pursuant to the CEA Act, that, taking into account the implementation of EnCana Ekwan's proposed mitigation measures, compliance with the Board's regulatory requirements and the proposed conditions attached to the Board's environmental screening report, the proposed project is not likely to cause significant adverse environmental effects.

Copies of the environmental screening report are available through the Board's library.

Chapter 7

Financial and Economic Matters

7.1 Financial Matters

The total estimated cost of the proposed pipeline is \$55 million. Project financing would be provided by EnCana Ekwan's parent and sole shareholder, EnCana Corporation.

No concerns regarding financing were raised during the proceeding.

Views of the Board

The Board is satisfied that EnCana Ekwan, through EnCana Corporation, is able to finance the proposed facilities.

7.2 Tolls, Tariff and Transportation

EnCana Ekwan stated that it is a commercially at-risk pipeline in that only EnCana Ekwan would be at risk should tolls or contracted volumes be insufficient to generate a reasonable return. The actual rate of return that EnCana Ekwan earns would depend on its ability to manage its costs.

EnCana Ekwan proposed a market-based toll for its transmission services and entered into a Precedent Agreement with an affiliate, EnCana Gas Marketing, to provide firm transportation service for a ten-year term at a fixed toll of \$214.74 per 10^3 m^3 /month (\$0.20/mcf).

EnCana Ekwan indicated it is prepared to offer other potential shippers a similar toll for a similar volume and term. If other potential shippers requested different types of firm service for smaller volumes or for shorter-term service commitments, EnCana Ekwan would be prepared to establish market-based tolls for those different types of transportation service.

If capacity were available after meeting firm transportation requirements, EnCana Ekwan would be prepared to offer Interruptible Transportation Service at market-based rates.

EnCana Ekwan's application was not contested in this regard.

Views of the Board

Pursuant to Part IV of the NEB Act, the Board must ensure that tolls are just and reasonable and that there is no unjust discrimination in tolls, service or facilities.

EnCana Ekwan's proposed fixed-term service toll would insulate its shipper from changes in transportation costs. In return for assuming the

risks of potentially stranded assets and possible cost increases, EnCana Ekwan has set the toll at a level which it believes will recover costs and provide an appropriate return on investment.

The Board notes that EnCana Ekwan is prepared to offer service to other shippers at market-based rates, thus not precluding other producers from shipping gas on the proposed pipeline.

Based on the above, the Board finds the proposed tolling methodology to be acceptable.

7.3 Method of Regulation

EnCana Ekwan applied to be regulated on a Group 2 basis for toll and tariff regulation. No concerns regarding the proposed method of regulation were raised during the proceeding.

Views of the Board

Having regard to its size, number of shippers and tolling methodology, the Board finds that, for administrative purposes, EnCana Ekwan should be regulated as a Group 2 Company in accordance with the Board's Memorandum of Guidance on the Regulation of Group 2 Companies (MOG) dated 6 December 1995.

In accordance with the Board's MOG, Group 2 Companies are regulated on a complaint basis and have reduced financial reporting requirements. Therefore, the Board does not consider it necessary to issue an order approving EnCana Ekwan's proposed tolls and tariffs. Nonetheless, EnCana Ekwan is required to file with the Board a copy of its finalized transportation rates prior to the commencement of operation of the proposed pipeline in accordance with paragraph 60(1)(a) of the NEB Act. If EnCana Ekwan changes its tariff in the future to accommodate other firm shippers or interruptible service, it will also be required to file copies of such revisions. The Board notes that as a Group 2 Company, EnCana Ekwan remains subject to the full regulatory authority of the Board. Should a prospective shipper have any concerns with access to or operation of the pipeline, such a shipper may always apply to the Board for relief.

The Board also advises that paragraphs 5(2)(a) through (c) of the Gas Pipeline Uniform Accounting Regulations apply to EnCana Ekwan, including the requirement to file annual audited financial statements.

7.4 Economic Feasibility

Markets

The gas transported on the Ekwan Pipeline would be delivered to the NGTL system from which it would be delivered to various markets in Canada and the United States. Since gas delivered on the Ekwan Pipeline would become part of the $77 \times 10^6 \text{ m}^3/\text{d}$ (2.7 Bcf/d) corporate supply pool of EnCana Gas Marketing and its affiliates, the Applicant requested and received an exemption from supplying detailed market data.²

Supply

EnCana Ekwan expects that the natural gas to be transported on the Ekwan Pipeline would be produced from wells located in the Greater Sierra area in the northeast corner of British Columbia on lands owned by EnCana O&G and potentially others.

EnCana O&G is a leading explorer, producer and landholder in British Columbia, with approximately 952 000 net ha (3,525 sections) of land in the Greater Sierra area. EnCana O&G has currently developed 120 000 net ha (443 sections) out of its 952 000 ha (3,525 sections) land position. EnCana O&G has identified the Jean Marie formation as a major new play in the Greater Sierra area, and is currently undertaking to develop this potential.

In the Greater Sierra region EnCana O&G drilled 77 wells in 2002, and expects to drill about 150 more wells in 2003. Ongoing development in the region is expected with about 500 potential drilling locations identified to date and current plans to drill about 100 wells per year. Typically in the Greater Sierra area, an EnCana O&G well producing from the Jean Marie formation produces at a stabilized rate of approximately $28 \times 10^3 \text{ m}^3/\text{d}$ (1 MMcf/d) after an initial 6 to 12 month decline.

As a result of this development, EnCana O&G expects to increase its gas production from the Greater Sierra area by $8.5 \times 10^6 \text{ m}^3/\text{d}$ (300 MMcf/d), bringing its total production from the area to $12.7 \times 10^6 \text{ m}^3/\text{d}$ (450 MMcf/d) by 2005.

The Applicant stated that EnCana O&G's new production is incremental to its existing gas production flowing onto Westcoast's Fort Nelson system and that EnCana O&G does not propose to strand Westcoast's Fort Nelson capacity by taking gas that is currently flowing on the Westcoast system and diverting it onto the Ekwan Pipeline.

Transportation Contracts

The only shipper which has entered into a Precedent Agreement with EnCana Ekwan to date is its affiliate, EnCana Gas Marketing. The initial Contract Demand Volume is $2.8 \times 10^6 \text{ m}^3/\text{d}$

² EnCana Ekwan sought an exemption, pursuant to Part I of the Board's Guidelines for Filing Requirements, from the requirement to submit the following information: (1) the status of other regulatory approvals, (2) shipper specific information respecting markets and upstream and downstream transportation arrangements, (3) shipper specific gas supply information and (4) rate base and cost of service information. The reasons given for requesting these exemptions related to the at-risk nature of the pipeline and the specific circumstances of the application. Relief from complying with these filing requirements was granted in a letter dated 25 April 2003.

(100 MMcf/d) commencing 1 April 2004 for a term of 10 years, with an option to increase it to any amount up to $5.7 \times 10^6 \text{ m}^3/\text{d}$ (200 MMcf/d) on 1 April 2005 and any amount up to $8.5 \times 10^6 \text{ m}^3/\text{d}$ (300 MMcf/d) on 1 April 2006.

EnCana Ekwan indicated it is prepared to enter into a firm transportation service agreement with any other prospective shipper. At the time of the hearing only one company, Penn West Petroleum Ltd., had expressed a written interest in contracting for capacity on the proposed pipeline.

Although the volumes in the precedent agreements signed at the time of the hearing are less than the design capacity of approximately $11.8 \times 10^6 \text{ m}^3/\text{d}$ (418 MMcf/d), the Applicant stated that the surplus capacity would be required to diversify EnCana O&G's transportation portfolio, to manage the risk of production losses attributable to outages on the Westcoast system due to maintenance or curtailments, and to provide ready expandability.

Views of the Board

When an applicant proposes to build a commercially at-risk pipeline, the Board expects that the facility would operate at a reasonable level of utilization over its economic life, meaning that there is a reasonable expectation there would be sufficient gas and that the gas would be able to find markets.

The gas that would be transported on the Ekwan Pipeline is expected to come from wells on EnCana O&G lands in the Greater Sierra area. EnCana O&G has been and continues to be active in the successful development of incremental gas resources in the region. Given EnCana O&G's land position, recent activity and development plans in the Greater Sierra area, it is reasonable to expect that EnCana O&G would achieve its expectation of increasing gas production by $8.5 \times 10^6 \text{ m}^3/\text{d}$ (300 MMcf/d) by 2005. With this reasonable expectation of incremental deliverability by EnCana O&G, the Board is satisfied that sufficient gas would be available such that the Ekwan Pipeline would be used and useful.

Although transportation commitments to date are lower than the proposed pipeline's design capacity, the Board is satisfied that the applied-for facilities are reasonable given the desire for operational and marketing flexibility, the prospects for supply growth, and the ability to access various markets. Further, the pipeline could reasonably provide a competitive transportation alternative for third-party producers in the area.

The Board notes that no intervenors challenged the economic feasibility of the proposed pipeline.

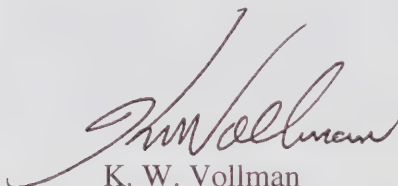
In summary, the Board finds that the proposed Ekwan Pipeline would be economically feasible and the pipeline would be used at a reasonable level over its economic life.

Chapter 8

Disposition

The foregoing constitutes our Decision and Reasons for Decision in respect of the Application heard before the Board in the GH-1-2003 proceeding.

The Board is satisfied from the evidence that the proposed Ekwan Pipeline is and will be required by the present and future public convenience and necessity. The Board approves EnCana Ekwan's Application made pursuant to section 52 of the NEB Act for new pipeline facilities and will, subject to the approval of the Governor in Council, issue a certificate subject to the conditions set out in Appendix II.



K. W. Vollman
Presiding Member



J.-P. Théorêt
Member



G. Caron
Member

Calgary, Alberta
September 2003

Appendix I

List of Issues

The Hearing Order identified, but did not limit itself to, the following issues for discussion in the GH-1-2003 proceeding:

1. The need for the proposed facilities.
2. The economic feasibility of the proposed facilities.
3. The potential commercial impacts of the proposed project.
4. The potential environmental and socio-economic effects of the proposed facilities, including those factors outlined in subsection 16(1) of the *Canadian Environmental Assessment Act*.
5. The appropriateness of the general route of the pipeline.
6. The method of toll and tariff regulation.
7. The suitability of the design of the proposed facilities.
8. The terms and conditions to be included in any approval the Board may issue.

Appendix II

Certificate Conditions

General

1. Unless the Board otherwise directs, EnCana Ekwan shall cause the approved facilities to be designed, manufactured, located, constructed and operated in accordance with those specifications, drawings, schedules, and other information or data set forth in its Application or as otherwise adduced in evidence before the Board in the GH-1-2003 proceeding.
2. Unless the Board otherwise directs, EnCana Ekwan shall implement or cause to be implemented all the policies, practices, mitigation measures, recommendations and procedures for the protection of the environment referred to in its Application, and adduced in evidence at the GH-1-2003 proceeding.
3. Within 30 days of the date that the approved facilities are placed in service or of the date that the last order was issued for leave to open, EnCana Ekwan shall file with the Board a confirmation, by an officer of the company, that the approved facilities were completed and constructed in compliance with all applicable conditions in this certificate. If compliance with any of these conditions cannot be confirmed, the officer of the company shall file with the Board details as to why compliance cannot be confirmed.

Prior to Commencement of Construction

4. EnCana Ekwan shall file with the Board, at least 30 days prior to the commencement of construction:
 - (a) the recommendations received from the British Columbia Ministry of Sustainable Resource Management for the Heritage Resource Studies; and
 - (b) for approval, the mitigation measures it proposes to address the recommendations in (a).
5. EnCana Ekwan shall file with the Board for approval, at least 30 days prior to the commencement of construction, a revised Access Management Plan, developed in consultation with the relevant regulatory authorities, which includes:
 - (a) the goals for monitoring and managing access;
 - (b) the measures and criteria to be used to achieve these goals;
 - (c) the frequency of inspections for access controls along the right-of-way during operations;

- (d) the criteria for determining the need for maintenance, repair, or installation of new access controls measures, including:
 - (i) a description of the contingency measures that will be implemented if existing access controls prove to be ineffective at preventing new access;
 - (ii) an indication of the maximum timeframe to implement contingency measures; and
 - (e) the frequency of reporting to the Board.
6. EnCana Ekwan shall file with the Board for approval, at least 30 days prior to the commencement of construction, the results of the Summer Rare Plant Survey, and if rare plants or rare plant communities are found during the survey, revised environmental protection procedures specific to protecting the identified rare plants and/or rare plant communities during construction and operations.
7. EnCana Ekwan shall file with the Board, at least 14 days prior to the commencement of construction or as otherwise directed by the Board:
- (a) updated environmental alignment sheets; and
 - (b) any other updates to its environmental protection plan.
8. EnCana Ekwan shall file with the Board for approval, at least 30 days prior to the commencement of construction, a re-vegetation monitoring plan designed to meet the long-term goal of re-establishing native vegetation on the right-of-way. The re-vegetation monitoring plan shall be developed in consultation with relevant regulatory authorities and shall include:
- (a) the goals for the re-vegetation monitoring plan;
 - (b) the measures and criteria to be used to achieve these goals;
 - (c) the frequency of monitoring activities along the right-of-way and in temporary workspaces; and
 - (d) an indication of expected reporting frequency to the Board on the progress and success of re-vegetation measures.

During Construction

9. EnCana Ekwan shall file with the Board, at least 14 days prior to pressure testing, its pressure testing program for the project, pursuant to sections 7 and 23 of the OPR-99.
10. EnCana Ekwan shall notify the Board in writing of any change from the proposed horizontal directional drilling watercourse crossing methods and the reasons for that change prior to implementation. EnCana Ekwan shall also file with the Board copies of

all correspondence from regulatory authorities relating to the changed crossing method. Within 30 days of implementing the changed watercourse crossing method, EnCana Ekwan shall file with the Board for approval, a description of amended reclamation and re-vegetation measures for the affected watercourse crossings.

Post Construction

11. EnCana Ekwan shall file with the Board no later than 6 months following the commencement of operations, an Environmental As-Built Report and environmental alignment sheets that indicate mitigation and protection measures as they have been implemented in the field, including, but not limited to the following:
 - (a) the location of all areas on the right-of-way that were re-seeded as part of reclamation;
 - (b) the location of all areas on the right-of-way that were left to natural re-vegetation;
 - (c) the location and type of all specialty re-vegetation measures, such as seedlings planted on steep slopes adjacent to watercourses; and
 - (d) the location and type of all access controls and line-of-sight measures along the right-of-way, including an indication of the length, width, and height of any physical barriers.

Expiration of Certificate

12. Unless the Board otherwise directs prior to 31 December 2004, this certificate shall expire on 31 December 2004 unless the construction and installation with respect to the applied-for facilities has commenced by that date.

